DOCUMENT RESUME

ED 131 135 UD 016 522

AUTHOR Bikson, Tora Kay
TITLE Minority Speech as Objectively Measured and Subjectively Evaluated.
PUB DATE Sep 74
NOTE 5p.; Not available in hard copy due to marginal reproducibility of original document

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS Caucasian Students; Comparative Analysis; Elementary Education; *Ethnic Groups; Ethnic Stereotypes; Evaluation; Evaluation Methods; Linguistic Competence; *Linguistic Performance; Mexican Americans; *Minority Groups; Negro Students; *Objective Tests; *Performance Factors; Racial Discrimination; Teacher Attitudes; *Teacher Evaluation

ABSTRACT

Spontaneous speech performance of ethnically diverse children was investigated by linguistic measures and teacher evaluations. Interview data was collected from 144 elementary school children, comprising equal white, Chicano, and black subsamples evenly divided among lower and higher grades. Speech evaluators were 60 white teachers. Analyses focused on whether minority children were, or were perceived as, linguistically deficient compared with white age mates. Measures indicate that minority speech performance equalled or excelled white performance, but teachers heard it as significantly inferior. Two points are noted: (1) teachers did not hear Chicano-black speech differences which appeared in the objective measures, suggesting that their inability to discriminate properties of unfamiliar speech styles partially accounts for differences between objective and subjective outcomes. (2) The very regular patterning of minority evaluation and the reversal of age trends from objective to subjective measures, suggest that ethnic stereotyping was also at work in the results. The extent to which teacher unresponsiveness to minority ability in the younger grades is related to absence of objective performance gains in the older grades is not assessed here. However, it is held that there are many links between speech performance style and school success. (Author/AM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED131135

Minority Speech as Objectively Measured and Subjectively Evaluated

Tora Kay Bikson, University of California, Los Angeles

Spontaneous speech performance of ethnically diverse subjects is investigated by way of objective linguistic measures and teacher evaluations. Interview data were collected from 144 elementary school children, comprising equal white, chicano and black subsamples evenly divided among lower and higher grades. Speech evaluators were 60 white teachers. Analyses focus on whether minority children are, or are perceived as, linguistically deficient compared with white age-mates. Objective measures indicate minority speech performance equals or excels white performance, but teachers hear it as significantly inferior. Evidence suggests systematic underrepresentation of minority language proficiency stems from discrimination difficulties and ethnic stereotyping.

BEST COPY AVAILABLE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

UD 016522

Minority Speech as Objectively Measured and Subjectively Evaluated

Tora Kay Bikson, University of California, Los Angeles

Race- and class-differentiated school achievement poses a problem increasingly investigated by way of differential language behavior. Explanations begin by noting that language is the chief academic transmission and testing medium. If lower status minority children are linguistically deficient, a consequent achievement difference would be expected. It has been proposed that minority children come to school with "less language"--they have less to say, and fewer labels less adequately organized for saying it (Raph, 1965; Bereiter, et. al., 1966). An alternative hypothesis is that minority children exhibit an undisturbed linguistic proficiency (Labov, 1970) which objective tests standardized over majority usage norms fail to represent. Similarly, higher status speakers such as teachers who regularly engage in spontaneous speech interactions with minority respondents may construe language differences as deficiencies, being unable to discriminate and appropriately evaluate the characteristics of a speech performance style other than their own. This circumstance along with speech-based ethnic stereotyping (Williams, 1970) would lead teachers systematically to underrepresent minority language performance. While teacher judgments and standardized test results should thus be mutually corroborative, the outcome would be contemporaneously inaccurate with a distressing potential for subsequent self-fulfillment.

Method

Subjects. Ss were 72 lower-grade (third-fourth) and 72 upper-grade (fifth-sixth) school children. Grade levels included equal numbers of white, chicano and black Ss, sex balanced within each ethnic group. Speech evaluators were 60 white teachers from elementary schools in another district who volunteered to participate in a study of children's speech properties.

Procedure. In an interview situation, each S told stories to each of four cartoon-like pictures from the Children's Apperception Test.[1] Card sequence was standardized, and Ss were encouraged to continue until they had nothing further to say. All outputs were tape recorded.

Dependent measures. From recorded outputs, the following set of linguistic measures was derived: (1) response length (fluency), or number of words; (2) vocabulary diversity, or number of different words; (3) repetitiveness (words/different words), or mean frequency of word recurrence; (4) dispersion, or standard deviation from mean recurrence rate; and (5) a uniformity:variety ratio, the coefficient of variation about mean recurrence frequency. It was hypothesized that such use-based measures would not corroborate standardized achievement measures which depict white children's performance as initially superior and gaining in relative advantage over grade school years. Rather, chicano and black speech performance was expected to equal or excel white performance, at least at the younger grade level (Entwisle, 1968).

Evaluation measures were derived from the same recorded outputs, using equivalent two-minute samples from each S. Samples were linked to form composite tapes of 12 speakers each, evenly divided among ethnic groups and sex-balanced within them; to avoid variance introduced by age differences, each tape sampled from one grade level only. Groups of five teachers listened to and evaluated composite tapes on five dimensions: (1) speech is fluent-disfluent; (2) vocabulary is diverse-narrow; (3) word usage is correct-incorrect; (4) pronounciation is bad-good; (5) sentences are fragmented-complete. Ethnicity estimates were also obtained. Scale values were summed across raters to provide a single score per S on each dimension. It was hypothesized that teachers' responses would not be congruent with objective sample properties but rather would reflect regular patterns of status differentiation paralleling patterns in standardized achievement data.

Results

Dependent measures were examined in analyses of variance where ethnicity, grade level and sex served as independent factors. Of primary interest were effects of ethnicity, grade level, and their interaction. These sources of variance were expected to indicate whether minority children are, or are perceived as, linguistically deficient compared with white age-mates over the elementary grades. Influence of sex was not examined. Planned

cell comparisons collapse over sex to investigate differences between groups defined by ethnicity and age.

Linguistic results. The verbal deficiency hypothesis predicts that, given equivalent tasks, chicano and black Ss will produce shorter responses involving fewer different words than white Ss. In fact, results showed a significant ($p \cong .05$) ethnic effect for response length with means favoring minority fluency. Cell comparisons indicated the difference was largest in the younger grades (chicano vs. white, $p<.01$; black vs. white, $p<.05$) and was insignificant in the upper grades. A similar result pattern emerged for number of different words, with one exception: in the white sample, significant gains in vocabulary diversity occurred between grade levels ($.05<p<.10$).

Repetitiveness and dispersion of word use were investigated to insure greater response length is not simply a function of greater repetition as a deficiency thesis would predict. Interestingly, both measures manifested strong effects ($p<.01$) for ethnicity, minority speech evidencing greater repetitiveness as well as greater dispersion of word types. Cell comparisons again located significant differences only in the lower grades, with the chicano-white contrast ($p<.01$) stronger than the black-white ($p<.05$) contrast.

The uniformity.variety ratio reflects vocabulary organization over a continuous text. On this measure too an ethnic effect ($p<.01$) emerged favoring minority speech performance with differences preponderant among lower grade groups ($p<.01$) and negligible in the higher grades. Since text length systematically distinguishes groups, its influence was probed by introducing a transform eliminating any differences on this measure due to number of different words in the speaker's working vocabulary. The results, representing speech organization independently of extent of the vocabulary involved, showed no effects for any source of variance.

Evaluation results. Because teachers were extremely accurate in guessing ethnicity, speech-based ethnic stereotyping as well as discrimination difficulties with unfamiliar speech styles could lead subjective measures to deviate from objective ones. Two evaluation dimensions, judged fluency and vocabulary diversity, reflected in content most closely what linguistic variables measured. Like its objective parallel, rated fluency showed a strong ethnic effect ($p<.025$) but direction of differences was reversed, minority Ss being judged less fluent than white Ss. Cell comparisons yielded equally significant ($p<.01$) white-chicano and white-black contrasts among higher grade Ss, mean evaluations of younger groups not differing significantly. Perceived vocabulary diversity shows similar significance patterns. Moreover, an ethnicity-by-grade interaction term approaching significance on the previous measure emerges in the judged diversity analysis ($p<.05$), indicating teacher evaluations of chicano and black speech become relatively more negative over grade levels even though minority performance manifests no such change on the objective measures.

The correctness of usage and pronounciation scales provided ways of exploring the hypothesis that status-defined style preferences guided teachers' judgments of speech proficiency. Vocabulary lists from each group indicated that lengthier word lists from minority respondents largely subsumed the white lexicon. Nevertheless, teachers heard significant ($p<.01$) ethnic differences in word use, judging white usage as more correct; cell comparisons exhibited the familiar pattern of increasing discrepancy with age. An isomorphic but statistically even stronger set of results came from the analysis of pronounciation ratings.

That subjective speech evaluation patterns are so internally coherent and so discrepant with objective measures suggests speech-based stereotyping is operative (in addition to discrimination difficulties). The sentence completeness scale was included to check this hypothesis. Pilot study indicated there were insufficient cases of sentence fragmenting for analysis. (Sentence incompletion has been found mainly to typify adult speech, presumably because only adults undertake sentences so long and complex as to be left dangling.) Nevertheless, results showed teachers hear minority children using significantly more ($p<.05$) sentence fragments, and hear this contrast most strikingly ($p<.01$) among older chicano, black and white speakers.

Discussion

A general picture of spontaneous speech characteristics of ethnically diverse Ss performing the same verbal task was provided by linguistic analyses above. Contrary to "deficiency" assumptions, chicano and black Ss produce longer responses instantiating

more different word types than white Ss. Minority speech also appears to be both more repetitive and more diverse, effects contingently related to response length. When a length-corrected index is used, no effects remain. To the extent length is appropriately included in characterizing verbal proficiency, minority children may be said to perform better than their white counterparts especially in the lower grades. When length is disregarded, white and minority children's spontaneous speech exhibits similar properties. In either case, objective measures reject the verbal deficiency hypothesis.

Patterns of subjective evaluations of speech properties do not, however, reflect their objective counterparts. Rather, when minority Ss are responding with greater facility than white age-mates (lower grades), teachers hear no significant differences; but when all groups are responding equivalently (older grades), teachers hear white Ss as significantly more proficient. Thus teacher evaluations, while mirroring reported achievement patterns obtained from standardized testing, systematically underrepresent minority performance. Two others points are worth noting. First, that teachers do not hear chicano-black speech differences which appear in the objective measures suggests that their inability to discriminate properties of unfamiliar speech styles partially accounts for differences between objective and subjective outcomes. Second, the very regular patterning of minority evaluation (even for non-existent sentence fragments), and the reversal of age trends from objective to subjective measures, suggests ethnic stereotyping is also at work in the results. The extent to which teacher unresponsiveness to minority ability at the younger grade level is related to absence of objective performance gains at the older level cannot be assessed here. However it is clear that there are many links between speech performance style and school success.

---

[1]Data were collected as part of a larger study of factors influencing adjustment and achievement in newly desegregated schools, NSF grant 4-444040-22064 (H. Gerard and N. Miller, principal investigators).

References

Bereiter, C., Englemann, S., Osborn, J., & Redford, P. An academically oriented preschool for culturally deprived children. In F. Hechinger (Ed.), Preschool education today. New York: Doubleday, 1966.

Entwisle, D. Developmental sociolinguistics: Inner-city children. American Journal of Sociology (74), 1968.

Labov, W. The logic of nonstandard English. In F. Williams (Ed.), Language and poverty. Chicago: Markham Press, 1970.

Raph, J. B. Language development in socially disadvantaged children. Review of Educational Research (35), 1965.

Williams, F. Language, attitude, and social change. In F. Williams (Ed.), Language and poverty. Chicago: Markham Press, 1970.